

REMARKS

The present invention is a method of controlling a transmitter of a portable radio communication apparatus for communication in a radio communication network employing transmission by a plurality of carrier frequencies in frames each including a predetermined number of time slots, a radio telephone system comprising a portable radio communication apparatus for communication in a radio communication network employing transmission by a plurality of carrier frequencies in frames each including a predetermined number of time slots and a portable radio communication apparatus operable to communicate with a radio communication network employing transmission by a plurality of carrier frequencies in frames each including a predetermined number of time slots.

Claims 1-2, 4-5, 7-9, 21-22, 24-25, 27, 29, 41, 43, 46 and 49 stand rejected under 35 U.S.C. §103 as being unpatentable over United States Patent 5,519,886 (Gilbert et al) in view of United States Patent 5,854,971 (Nagoya et al). These grounds of rejection are traversed for the following reasons.

Independent claims 1, 21 and 41 recite substantively the monitoring of at least one criterion associated with heat generated by a transmitter with the at least one monitored criterion comprising the number of transmitted data bursts in a frame. This subject matter has no counterpart in the combined teachings of Gilbert et al and Nagoya et al.

While Gilbert et al do teach monitoring heat generated by the power amplifier 244 using a temperature sensor 246, the at least one monitored criterion does not comprise the number of transmitted data bursts in a frame. Column 2, lines 50-54, teach that "[t]he data transmission portion 240 also includes a temperature sensor 246 in close proximity to the

RF power amplifier 244, which measures the temperature of heat sensitive components and/or modules which may be affected by transmissions...RF power amplifier 244 represents one of such heat sensitive module and the temperature sensor 246 represents a temperature information source which provides temperature information regarding the RF power amplifier 244 to the controller 210." It is therefore seen that there is no at least one monitoring criteria comprising the number of transmitted data bursts associated with monitoring at least one criteria associated with heat generated by the transmitter as recited in independent claims 1, 21 and 41. The Examiner's reliance upon Nagoya et al does not cure this deficiency.

Nagoya et al, contrary to the Examiner's construction thereof, does not monitor the number of transmitted data bursts in a frame which constitutes "at least one criteria associated with heat generated by the transmitter". Instead, Nagoya et al teach that the monitoring of the bursts by burst detector 9 is used for purposes of providing timing of the hold circuit 10 for capturing the output of the temperature compensation circuit 6 which functions for purposes of regulating the output of power amplifier by use of a variable attenuator 1 to attenuate the signal level input to the power amplifier. The monitoring to the bursts by the burst monitor circuit 9 is clearly taught in column 6, lines 63-66, that "[t]he operation of the feedback loop is performed during a period of time when the ramp bits at the time of rising of the burst signal are transmitted". In other words, the output power is controlled to a predetermined value occurring during the ramp bit transmit period provided by the burst monitor circuit. See column 7, lines 3-5. Accordingly, if the proposed combination were made, the subject matter of independent claims 1, 21 and 41 would not be achieved

regarding monitoring at least one criteria associated with heat generated by the transmitter wherein one of the at least one monitoring criteria comprises the number of transmitted data bursts in a frame. Instead, as stated above, the monitoring of data bursts in Nagoya et al is purely for purposes of timing the holding of the output of the temperature compensation circuit 6 during the timing of a burst monitor circuit 9 so as to control the level of the input signal to the power amplifier 2 by applying a control signal to the variable attenuator 1.

Moreover, dependent claims 2, 4-5, 7-9, 22, 24-25, 27, 29, 43, 46 and 49 further limit the subject matter of independent claims 1, 21, and 41 in a manner which is not rendered obvious by the proposed combination.

Claims 6, 26 and 28 stand rejected under 35 U.S.C. §103 as being unpatentable over Gilbert in view of Nagoya et al further in view of United States Patent 4,636,741 (Mitzlaff). These grounds of rejection are traversed for the following reasons.

Mitzlaff has been cited as teaching the operational class of the transceiver is changed from class 1 to class 3 with the Examiner relying upon column 9, lines 1-17, and further, as teaching the transmission power level monitoring for maximum power level in order to change the power class between operating class 1 and 3 with the Examiner citing column 8, line 51, to column 9, line 45. However, Mitzlaff does not cure the deficiencies noted above with respect to Gilbert et al and Nagoya et al. Mitzlaff does not suggest to a person of ordinary skill in the art the monitoring of at least one criteria associated with heat generated by the transmitter wherein the at least one monitored criteria comprises the number of transmitted data bursts. Accordingly, the subject matter of claim 6, which is dependent on

claim 1 and the subject matter of claims 26 and 28, which are dependent upon claim 21 is not rendered obvious.

Claims 10 and 30 stand rejected under 35 U.S.C. §103 as being unpatentable over Gilbert et al in view of Nagoya et al further in view of United States Patent 6,169,884 (Funk). Funk has been cited as teaching the monitoring step performed by a radio communication network. However, Funk does not cure the deficiencies noted above with respect to independent claims 1 and 21.

Claims 11-13, 15-17, 31-33, 35-37, 44 and 47 stand rejected under 35 U.S.C. §103 as being unpatentable over Gilbert et al in view of Nagoya et al further in view of United States Patent 6,067,458 (Chen). These grounds of rejection traversed for the following reasons.

Independent claims 11 and 31 teach monitoring of the number of data bursts transmitted on time slots in a frame and changing the operation of the transmitter if the monitored number falls outside the predetermined limit. Neither Gilbert et al nor Nagoya et al teach the monitoring of the number of data bursts transmitted on time slots in a frame and changing the operation of the transmitter if the monitored number falls outside the predetermined limit. Specifically, Gilbert et al's temperature sensor merely monitors the temperature of the RF power amplifier 244 without any consideration being given to the number of data bursts transmitted on time slots and further, the bursts monitor circuit 9 of Nagoya et al merely times the occurrence of a burst by monitoring the occurrence of bursts in order to acquire the appropriate temperature compensation signal from the temperature compensation circuit 6 which is used to control the variable attenuator 1 in order to control the power amplifier 2 output. Accordingly, the subject matter of claims 11-13, 15-17, 31-33,

35-37, 44 and 47 is not rendered obvious by the proposed combination of Gilbert et al in view of Nagoya et al further in view of Chen which has been cited as teaching monitoring of a transmission data rate at different predetermined limits and further improve power control to match a correct transmission rate.

Claim 14 stands rejected under 35 U.S.C. §103 as being unpatentable over Gilbert et al, Nagoya et al, Chen and further in view of United States Patent 4,636,741 (Mitzlaff). These grounds of rejection are traversed for the following reasons.

The deficiencies of the proposed combination of Gilbert et al, Nagoya et al and Chen have been pointed out above. Furthermore, the citation of Mitzlaff as teaching the operational class of a transmitter is changed from class 1 to class 3 to control transmitting power does not cure the deficiencies noted above. Accordingly, the subject matter of claim 14 which depends from claim 11, as discussed above, is not rendered obvious for the reasons stated herein and for the reasons stated above with respect to the deficiencies of the rejection of claim 11.

Claims 18 and 38 stand rejected under 35 U.S.C. §103 as being unpatentable over Gilbert et al in view of Nagoya et al, Chen and further in view of United States Patent 6,169,884 (Funk). These grounds of rejection are traversed for the following reasons.

The citation of Funk does not cure the deficiencies noted above with respect to the rejection of independent claims 11 and 31. Funk has been cited as teaching reducing transmission power by inserting a brief pause in monitoring the transmitting, receiver, data at host computer and modem. However, this teaching does not cure the deficiencies noted above with respect to independent claims 11 and 31.

Claims 19 and 45 stand rejected under 35 U.S.C. §103 as being unpatentable over Gilbert et al in view of United States Patent 5,815,820 (Kiem et al) further in view of Mitzlaff. These grounds of rejection are traversed for the following reasons.

Claim 19 recites a method for controlling a transmitter of a portable radio communication apparatus for communication in a radio communication network employing transmission by a plurality of carrier frequencies in frames each including a predetermined number of time slots comprising monitoring the transmission power level of a communication apparatus and comparing the monitored transmitting power level with a predetermined limit and changing the maximum allowed power level in response to the monitored transmission power level; and wherein the monitored transmission power level is compared with a predetermined power transmission level and if the monitored transmission power level is above a pre-determined level, then the maximum allowed output power level is decreased by changing the power class mark of the portable radio communication apparatus.

It is submitted that Gilbert et al do not teach that the monitored transmission power level is compared with a predetermined level with the subsequent steps of claim 19 being influenced thereon.

Kiem et al teach adjusting a transmission power level responsive to a position of a movable antenna. However, it is submitted that this does not teach the aforementioned monitoring the transmission power level of the communication apparatus and comparing the monitored transmission power level with a pre-determined limit and changing the maximum allowed transmission power level in response to the monitored transmission power level and if the monitored transmission power level is above a pre-determined level, then the maximum

allowed output transmission power is decreased by changing the power class mark of the portable radio communication apparatus.

Moreover, the citation of Mitzlaff as teaching the operational class of a transmitter is changed from class 1 to class 3 does not cure the aforementioned deficiencies.

Finally, the Examiner has not demonstrated any basis why a person of ordinary skill in the art would be motivated to combine the teachings of Gilbert et al in view of Kiem et al and further in view of Mitzlaff except by impermissible hindsight.

Claim 34 stands rejected under 35 U.S.C. §103 as being unpatentable over Gilbert et al in view of Nagoya et al, Chen and further in view of Mitzlaff. These grounds of rejection are traversed for the following reasons.

Claim 34 further limits claim 31 with the deficiencies of the prior art not teaching monitoring the number of data bursts transmitted on time slots in a frame having been pointed out above in the discussion of the rejection of claim 31 with respect to the combination of Gilbert et al in view of Nagoya et al and Chen. Mitzlaff does not cure the deficiencies noted above with respect to the aforementioned patents.

Claims 39 and 48 stand rejected under 35 U.S.C. §103 as being unpatentable over Gilbert et al in view of Nagoya et al further in view of Kiem et al.

Claim 39 is patentable for the same reasons set forth above with respect to claims 19 and 45 wherein the prior art does not teach the monitored transmission power level is compared with a predetermined power transmission level and if the monitored transmission power level is above said pre-determined level then the maximum allowed output power level is decreased by changing the power class mark of the portable radio communication

apparatus. It is submitted that the combined teachings of Gilbert et al, Nagoya et al and Kiem et al, which teaches adjusting of the transmission power dependent on antenna position ,do not suggest this subject matter. It is submitted that a person of ordinary skill in the art would not make the proposed combination except by impermissible hindsight.

Claims 42 and 50 stand rejected under 35 U.S.C. §103 as being unpatentable over Gilbert et al in view of Mitzlaff '741. These grounds of rejection are traversed for the following reasons.

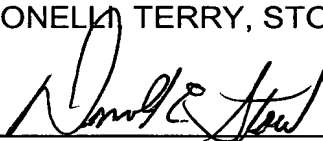
The deficiencies of Gilbert et al have been pointed out above which does not monitor at least one criteria associated with the heat generated by the transmitter since Gilbert et al monitors the temperature of the RF power amplifier 244 which is not associated with the monitoring of at least on criteria associated with heat generated by a transmitter which is association with the registration of a power class mark with the network and further sending a power class mark change request to the network responsive to the monitored criteria with the network accordingly changing the power class mark of the radio power of the portable radio communication apparatus. Mitzlaff teaches the operation of portable radio transmitters dependent upon insertion in a vehicular adaptor. See the Abstract. This does not teach the aforementioned limitations involving the interaction with the network. Claim 50 is patentable for the same reasons set forth above with respect to claim 42.

In view of the foregoing amendments and remarks, it is submitted that each of the claims in the application is in condition for allowance. Accordingly, early allowance thereof is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 C.F.R. §1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (attorney docket no. 367.39585X00).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

A handwritten signature in black ink, appearing to read "Donald E. Stout", is written over a horizontal line.

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